**King County International Airport Boeing Field** Department of Construction and Facilities Management P.O. Box 80245 Scattle, WA 98108 (206) 296-2799 (206) 296-0100 TDD (206) 296-0190 FAX

### FAX COVER SHEET

DATE:

March 21, 1996

NO. OF PAGES INCL. THIS COVER: 7

TO:

Carolyn Read, FAA

FAX #:

227-1650

FROM:

JULIE

RODWELL,

**AIRPORT** 

**PLANNING** 

**MANAGER** 

PHONE:

(206) 296-2799 / our FAX 29-60-190

COMMENTS:

At Jack's request I am faxing a copy of the Steam Plant report. We plan to scan it into our system and finalize it fairly soon. This will include corrections re the RPZ and Part 77 surface. Please let me have any corrections you would like to make or any new issues you would like us to

address before we finalize it.

Thanks.

cc. Monica Alcabin, TRA Helen Brown, TRA Jack Frazelle Jeff Winter

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## WHITE PAPER Regarding the Seattle City Light Steam Plant

## QUESTION: MUST KING COUNTY TAKE ACTION REGARDING THE NEARBY SEATTLE CITY LIGHT STEAM PLANT?

The King County International Airport, generally referred to as Boeing Field International (BFI), is considering whether it must take action regarding the Georgetown Steam Plant located at the north end of its property. There is a long-standing question of whether the Plant poses a hazard to aviation and if so, whether the hazard is of a sufficient magnitude to require the Plant's removal. In such a case, other questions arise, including who should be responsible for the demolition, how should it be done, given the Plant's historical significance, and where should the funding be found to pay for the project.

The following provides a brief history of this issue and a summary of the issues involved.

GENERALLY: The Georgetown Steam Plant, currently owned by Seattle City Light, has had a long relationship with Boeing Field International Airport and the aviation activity which it supports. The plant is a retired steam driven electrical generating plant originally constructed in 1906 and is locate on a parcel of land at the north end of Boeing Field. It originally was coal fired and had two tall stacks, the largest of which was 286 feet tall. With the development of Boeing Field and conversion of the Plant's boilers to oil, these were replaced in the 1930's with lower structures.

Despite this change, the Steam Plant is currently listed in Federal Aviation Administration's Airport Obstruction Chart due to the fact that it trespasses over the western edge of the Airport's clear zone and exceeds the height limitations allowed for the area. The obstruction posed by the Plant has been an issue since the founding of the Airport and BFI, over the last four decades, has periodically considered acquiring and demolishing the structure. A variety of factors however have complicated the Plant's removal and, as a result, it continues to stand to this day.

CLEAR ZONE IN THE 1950'S. In the mid-1950's, the Civil Aeronautics Authority, the FAA's predecessor, apparently required BFI to formally create a clear zone at the north end of its runway. Because the zone included the Steam Plant property, King County entered into negotiations with the City of Seattle for its acquisition. Complications immediately arose and in a letter dated July 13, 1956, the King County Property Department informed the City that, while it had not changed its acquisition plans, it was wondering how to fund the project. It seems that the CAA had recently taken the position that it would not provide Federal matching funds for acquisition of property purchased from "another municipal corporation". This apparently forestalled further action by the County, but the Steam Plant and its affect on

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aviation safety continued to be the subject of discussion during the four decades.

REMOVAL AS A CONDITION OF FEDERAL GRANTS IN THE 1960'S. In 1965, King County accepted a financial grant from the FAA, pursuant to Grant Agreement C-618, a condition of which (Special Condition No. 11) required the County to acquire title to the Steam Plant. By 1969, the County had not fulfilled this requirement and was advised by the FAA that its continuing failure to do so would have adverse consequences on its relationship with the Agency. Lengthy correspondence thereafter ensued between the County and City concerning purchase of the property, and between the County and the FAA, eventually resulting in the latter giving the former a deadline of August, 1970 for action. After an additional exchange of communications, the FAA granted the County's request for a two year extension, during which the County developed a Comprehensive Obstruction Removal Plan for the Airport.

This Plan did several things. First, it surveyed all aviation hazards then in existence, calculated their respective impacts, and considered the feasibility of mitigating each. In the case of the Steam Plant, the Plan concluded that the public's interest in retaining its electrical generating capacity outweighed the relatively small increase in aviation safety and monetary benefit to the Airport's users which its demolition would offer. The Plan did allow that:

"(t)her removal of the standby power plant should remain as a desirable goal (h)owever) no date for removal will be shown. Should the value of this structure change significantly, or circumstances change to make it easier for the County to acquire the power plant, then a new feasibility study will be undertaken."

One of the principal factors which made removal of the Plant difficult was its value to the Bonneville Power Authority as a backup electrical generating facility. While the Plant had not been in regular service since World War II and could sustain only limited periods of continuous operation, it nevertheless provided a 21,000 KW peak generating capacity during power shortages. Bonneville therefore provided City Light with an annual power credit estimated to be worth approximately \$500,000 in order to retain this reserve capacity. Given Bonneville's interest, the FAA, if it attempted to force removal of the Steam Plant, would have had to demonstrate that the Plant constituted a serious threat to the public safety (i.e. as an aviation hazard) and that the public interest served by removing that hazard outweighed the public interest in retaining the Plant's electrical generating capacity. It appears that the precess-of developing BFI's Obstruction Removal Plan demonstrated that this would be a difficult burden of proof to meet.

Another factor complicating removal of the Plant was money. During preliminary discussions between the County and the City in early 1973, the latter was quick to point to the annual power credit afforded it by Bonneville and suggested that a ten year amortization of that amount, or \$5,000,000, was an appropriate purchase price for the Plant. In addition to the substantial purchase price, the cost of demolition could be high given the potentially hazardous substances associated with the Plant's seventy years of industrial operation. Finally, it was unclear where money would come from for acquisition and demolition. King County Property Manager Chris Loutsis, in an August 5, 1970 letter to FAA Airports Branch Chief Hans Spencer points out that:

"The financial situation of the airport (and King County) is such that, even if it were possible to reach an immediate agreement with City Light, there are not funds available to purchase and remove the building."

This assessment of the County's financial disability was made at a time when the County and City were discussing a \$3,000,000 purchase price, rather that the \$5,000,000 figure which the City suggested two and a half years later. The Loutsis letter also noted that King County could acquire the property only if the City were a willing seller in light of the fact that one public body could not exercise a right of eminent domain against another.

In July, 1973, the FAA concurred with the County's newly adopted Obstruction Removal Plan and in doing so, effectively reversed it position on the need to immediately acquire and demolish the Steam Plant. It agreed with the Plan's conclusion that removal of the Plant continued to be a desirable goal, but acceded to the County's request to amend the 1965 grant agreement and delete Special Condition 11. Since that time, the FAA further limited the justification for the Plant's removal by declaring in 1981 that the Plant was <u>not</u> a hazard to navigation (letter from George Buley, discussed below).

LANDMARK DESIGNATIONS IN THE 1970'S. Even though King County had won a reprieve from the FAA's stricture, it continue to discuss acquisition of the Steam Plant with the City. At the time, the Plant's efficiency was calculated to be one third that of a modern oil-fired plant and its machinery, much of which was of a 1906-1918 vintage, needed continued maintenance in order to keep it in working order. Further, the oil-fired steam boilers did not meet clean air or water standards and City Light's potential legal liabilities were growing as state and national policy makers expanded laws protecting the environment.

By late 1977, the negotiations between the City and County were bearing fruit and City Light was taking steps toward disposing of the Steam Plant. In preparation for this, the City began developing an Environmental Impact Statement (EIS) and requested comments from interested parties. At this point however, another countervailing public policy consideration intervened to complicate the sale. This time it involved recognition of the Steam Plant's historic significance.

In November 1977, the Governor's Advisory Council on Historic Preservation recommended that the Steam Plant be nominated to the National Register of Historic Places and in early 1978, the State office of Archeology and Historic Preservation submitted a formal nomination for the Plant, its oil tanks, and its machinery. The Federal laws which established the National Register provided that projects which were federally funded or licensed could not adversely impact the historical significance of sites nominated to or listed on the Register. This posed serious obstacles to the Steam Plant's removal in light of the fact that King County was the recipient of various federal grants, not the least of which were grants through the FAA for the benefit of Boeing Field. The City similarly was a recipient of federal aid and its City Light division held a "FERG" license in order to participate in Bonneville's electrical power grid.

King County was apparently initially unaware of the nomination, but when it was notified by that State in mid-1978, it reacted quickly. King County Executive John Spellman, in a July 28 letter, requested that the Keeper of the National Register in Washington D.C postpone action on the nomination until the County had the opportunity to study its affect on airport operations at Boeing Field. Despite this request, the Steam Plant was eventually placed on the Register and subsequently received various other historic recognitions.

According to City Light's property manager David Flores, the Steam Plant is presently listed

on five separate historic registers:

- A. Seattle City Landmark
- B. Washington State Landmark
- C. National Historic Landmark
- D. National Historical Mechanical Engineering Landmark
- E. National Register for Historic Places



It is unknown what the cumulative effects are of the legal protections afforded by these historic designations, however it seems fair to conclude that they pose a substantial impediment to the Plant's removal by a local, state, or federal agency.

EIS DETERMINATIONS IN 1981. The Steam Plant's historic significance and the need for its potential removal were considered as part of an environmental review of adaptive use alternatives completed in 1981 by City Light. The EIS discussed four alternatives for the Plant and, while making no recommendations as to preference, seemed to lean in favor of retaining the building and its contents in some form. It is noteworthy that the FAA, through its Planning and Programming Branch Chief, George Buley, included a letter in the appendix of the EIS stating:

"The presence of the building and associated oil tank, while generally undesirable form any airport planning standpoint, are not considered by the Federal Aviation Administration to be hazards to air navigation. Their removal alone would not result in lower altitude or visibility minimums."

In support of the FAA's determination, the EIS documents the Steam Plant's location on the extreme edge of the airport's Clear Zone and the minimal increases in visibility minimums and runway useability which its removal would offer. In conclusion, the EIS cites the determination by the County and FAA that "the margin of safety gained does not justify expenditure of public funds for the purpose of removing the steam plant".

#### CONCLUSIONS AND RECOMMENDATIONS.

Despite four decades of negotiations, studies, and planning directed toward its immanent removal, the Georgetown Steam Plant still stands at the north end of Boeing Field. City Light has removed the oil tank used to fuel the generators as well as the nearby electrical transformers, and has encapsulating hazardous asbestos in the building's interior. The building was leased to a museum group for several years, but presently sits empty and unused.

After completion of the 1981 EIS, discussion about removing the Plant has quieted, but not entirely ceased. Presently, the issue is entering its fifth generation and seems to once again be reviving. Therefore, the following recommendations are offered to help guide future discussions.

At the outset, BFI must first decide whether there is a reason to acquire the Steam Plant or otherwise seek its alteration or removal.

If so, the first consideration is whether there are strong public policy reasons to support the Plant's demolition and whether they surmount those which preserve its historical significance.

In this regard, airport safety and the removal of hazards to aviation appear to be weak justifications, given the FAA's "no hazard" determination.

BFI should also explore alternatives to demolition. Partial preservation of the Plant however, such as removal of its machinery to an alternative site and demolition of the building, appears to be unworkable, given the integrated nature of the site's National Register nomination and the cost of removal and setup.

Fiscal considerations continue to affect the question as well. By purchasing the site, BFI will acquire land which may produce revenue and may create easier access to other airport lands at the north end of the field. The cost / benefit ratio of such a purchase however is unclear. The value that City Light places on the Plant and its surrounding acreage is presently unknown and the site has a history of pollution. The Plant contains asbestos and the land surrounding the Plant and comprising the flume area leading to the Duamish River contains evidence of PCB's and petroleum-based hydrocarbons. These factors would add to a purchaser's cost of demolition and site remediation.

Further, the decade's-old question of where the money would come from for acquisition, demolition, and clean up remains open. The FAA has, at various times, taken the position that it would not provide grant funds for the project. Further, in light of King County's financial responsibilities, not the least of which is repairing or replacing the Kingdome, it is unlikely that money for the Plant would be available in the County budget.

In conclusion, BFI and King County must determine a) what disposition of the Steam Plant issue best serves its interests, b) whether the public interest support such a disposition, and c) where the funding will come from to pay for the project. Because of the conflicting public policy interests which have attached to the Steam Plant issue over the years, BFI should work closely with the FAA and City Light to craft a plan of action which seeks to accommodate as many of the interests involved as possible.

JG/3-95

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